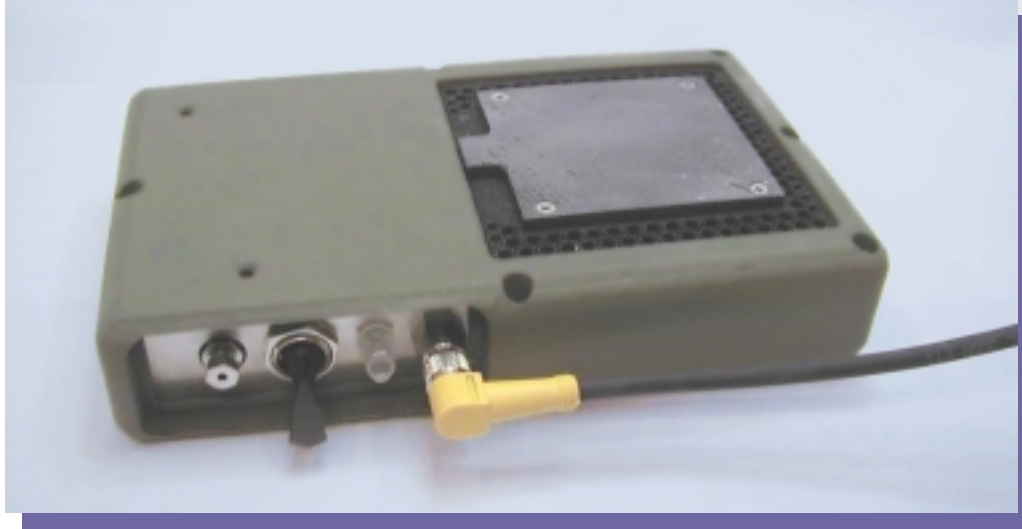


Personal Power System Preliminary Technology Update



Ball Aerospace & Technologies Corp. is developing a small, lightweight power system to supply electrical energy to user devices such as computers, radios and transceivers, night vision goggles, and other electrical devices.

The unit will supply either 8 volts or 12 volts at 15 watts average power. It has a surge power capability of up to 25 watts. Two units can be connected in series or parallel to supply more average power if needed. If more peak power is required, a hybrid system of a **Personal Power System** and rechargeable battery may be used.

With a compact hydrogen source in development at Ball Aerospace, the unit can supply energy for long missions, either replacing a battery or used to recharge a battery.

Personal Power System Characteristics

Specifications		Comments
Power		
Average	15 watts	
Peak	25 watts	
Voltage	8 or 12 V dc	Can supply both voltages simultaneously
Size (inches)	4x6x1.25	Orientation insensitive
Weight	1.5 pounds	

Hydrogen Source

(Not shown, chemical H₂ source)

Energy	350 watt-hours	
Size	2.5 in. diameter 6 in. long	
Weight	0.75 pounds	
Hours of life per H ₂ source	At 10 watts average power – 35 hours continuous	Each additional H ₂ source adds another 35 hours
	At 5 watts average power – 70 hours continuous	Each additional H ₂ source adds another 70 hours



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